



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/058,036      | 01/29/2002  | Toshihiro Takagi     | 3064IT/50896        | 2683             |

7590 08/30/2007  
Crowell & Moring, L.L.P.  
P.O. Box 14300  
Washington, DC 20044-4300

|          |
|----------|
| EXAMINER |
|----------|

SHEPARD, JUSTIN E

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2623

|           |               |
|-----------|---------------|
| MAIL DATE | DELIVERY MODE |
|-----------|---------------|

08/30/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/058,036

Applicant(s)

TAKAGI ET AL.

Examiner

Justin E. Shepard

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4,5 and 8-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,5 and 8-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 5, and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani (6,661,472) in view of Ellis (6,766,526).

Referring to claim 1, Shintani discloses a channel selection device in the digital/analog broadcasting receiver comprising:

a receiver for receiving coded digital/analog broadcasting signals transmitted from a broadcasting station (figure 1B, part 160; figure 4, boxes 415 and 430);

a digital/analog decoder for decoding the digital/analog broadcasting signals received by the receiver and outputting them to an image-displaying display device connected to the broadcasting receiver (figure 5);

a memory for storing a channel information included in the broadcasting signals decoded by the digital decoder (column 4, lines 11-13); a control unit for controlling the device (figure 1B, part 165); and

an input device used for a user to input an operation instruction including the channel selection to the control unit (figure 1B, part 100; figure 1A),

wherein the digital broadcasting signals have one or a plurality of sub-channels to transmit contents in one main channel (figure 4, box 430),

wherein the input device has a predetermined operation key to which an operation instruction is assigned to fix the channel, in addition to numerical-value input keys for inputting the channel number (figure 1A; column 4, lines 44-53),

wherein the control unit fixes the main/sub-channel in response to the operation instruction from the input device during the reception of the broadcast by the broadcasting receiver (column 3, lines 62-67; column 4, lines 1-7),

wherein the second selecting procedure, when receiving the input of a numerical value by the numerical-value input keys, and then receiving the input by the predetermined operation key, fixes the main channel of the number of the inputted numerical-value, and waits for the sub-channel number input, and then fixes the sub-channel of the number of the numerical value inputted by the numerical-value input keys (column 5, lines 59-63; figure 2A).

Shintani does not disclose a device for main/sub channel selection by one of two procedures; wherein the first selecting procedure, when receiving an instruction by the predetermined operation key without inputting the main channel number that is not preceded by the numerical-value input keys, fixes the main channel being currently received, and waits for the sub-channel number input, and then fixes the sub-channel of the number of the numerical value inputted by the numerical-value input keys.

In an analogous art, Ellis teaches a device for main/sub channel selection by one of two procedures (figure 4; figure 6C; column 7, lines 3-13; figure 11; column 9, lines 32-49); wherein the first selecting procedure, when receiving an instruction by the predetermined operation key without inputting the main channel number that is not preceded by the numerical-value input keys, fixes the main channel being currently received, and waits for the sub-channel number input, and then fixes the sub-channel of the number of the numerical value inputted by the numerical-value input keys (figure 6C; column 7, lines 3-13; figure 11; column 9, lines 32-49).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the graphical channel searching taught by Ellis to the device disclosed by Shintani. The motivation would have been to enable a user to tune to any channel available to him/her without knowing the specific channel numbers, thereby making the system easier to use.

Claim 8 is rejected on the same grounds as claim 1.

Referring to claim 4, Shintani discloses a channel selection device in the digital/analog broadcasting receiver according to claim 2, wherein the predetermined operation key is a "-" key (column 3, lines 30-33; Note: as the operation key is not a "-" in Ellis, Shintani shows that the "-" key is an obvious choice to perform the action).

Claim 9 is rejected on the same grounds as claim 4.

Referring to claim 5, Shintani does not disclose a channel selection device in the digital/analog broadcasting receiver according to claim 2, wherein the channel selection device further comprises an On-Screen Display (OSD) output circuit for OSD displaying the main channel number and the sub-channel number inputted by the numerical-value input keys and fixed by the control unit on the display device.

In an analogous art, Ellis teaches a channel selection device in the digital/analog broadcasting receiver according to claim 2, wherein the channel selection device further comprises an On-Screen Display (OSD) output circuit for OSD displaying the main channel number and the sub-channel number inputted by the numerical-value input keys and fixed by the control unit on the display device (column 3, line 66 to column 4, line 2; figure 4; figure 11).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the OSD circuit taught by Ellis to the system disclosed by Shintani. The motivation would have been to offer the user a visual feedback that would warn him/her if an unwanted key had been pressed.

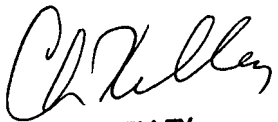
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin E. Shepard whose telephone number is (571) 272-5967. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JS

  
CHRIS KELLEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600